B. Remarks

1. Status of the Application

Claims 1-19, 26-34, and 36-46 are pending in the application. All claims stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Claims 15-16, 32-35, and 39-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,864,180 ("Barraclough").[1] Claims 1-6, 13-14, and 26-31 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Barraclough in view of Japan Patent No. 03-221922 ("Yuichi") or vice versa. Applicants respectfully traverse the foregoing bases for rejection and request reconsideration and withdrawal thereof.

2. The Claimed Subject Matter Is Enabled.

The examiner has rejected all of the pending claims under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement because the claims contain subject matter that purportedly was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Office Action at 2. In particular, the examiner contends that the specification does not enable the claimed subject matter directed to etching both a layer of a first conductive material and a layer of a second conductive material using a single etchant. *Id.* Applicants respectfully traverse this ground for rejection for two reasons.

First, claims 1-14, 19, 26-28, 31, 36-38, and 41 do not recite etching both a layer of a first conductive material and a layer of a second conductive material using a single etchant. Further, Applicants have never argued that these claims require etching both a layer of a first conductive

[1] Whereas the Office Action indicates that claim 35 stands rejected, Applicants note that claim 35 was canceled from the application by Amendment C, filed on January 11, 2008.

material and a layer of a second conductive material using a single etchant. As such, the foregoing rejection is inapplicable to these claims and should be withdrawn with respect thereto.

Second, those claims that do recite etching both a layer of a first conductive material and a layer of a second conductive material using a single etchant, namely, claims 15-18, 29-30, 32-34, 39-40, and 42-44, are indeed enabled. Title 35 U.S.C. § 112, first paragraph, which sets forth the enablement requirement, provides that:

> The specification shall contain a written description of the invention, and of the manner and process of using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Courts interpret this statute to require that the claimed invention be enabled so that any person skilled in the art can make and use the invention without undue experimentation. *In re Wands*, 858 F.2d (Fed. Cir. 1988). *See also U.S. v. Telectronics, Inc.*, 857 F.2d 778 (Fed. Cir. 1988) ("The test for enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.").

The specification expressly discloses in at least Paragraphs [0017] and [0020] certain examples of materials that could be used to embody the layer of a first conductive material and the layer of a second conductive material and indicates that these layers could be embodied using other materials, as well. The specification also expressly discloses in at least Paragraph [0030] etching both a layer of a first conductive material and a layer of a second conductive material using a single etchant. Although the specification does not expressly disclose examples of etchants that could be used to etch both the layer of a first conductive material and the layer of a second conductive material, one of ordinary skill in the art to which the invention most closely

pertains, having reviewed the specification, would understand how to select such an etchant without undue experimentation. For example, one skilled in the art would understand how to select an etchant capable of etching the material selected for the first layer of conductive material and an etchant capable of etching the material selected for the second layer of conductive material without undue experimentation, either based on personal knowledge and experience or by reference to readily available material data sheets, engineering handbooks, or vendor resources. Having done so, such person would be able to readily identify an etchant suitable for etching both the first and second layers of conductive material without undue experimentation.

Based on the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection of the pending claims under 35 U.S.C. § 112, first paragraph.

3. The Claims Are Patentable Over Barraclough and Yuichi.

The examiner has rejected claims 15-16, 32-34, and 39-40 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,864,180 ("Barraclough"), and the examiner has rejected claims 1-6, 13-14, and 26-31 under 35 U.S.C. § 103(a) as being unpatentable over Barraclough in view of Japan Patent No. 03-221922 ("Yuichi") or vice versa.[2] The examiner's bases for rejection are essentially identical to those set forth in the Office Action mailed on July 18, 2007. Applicants fully responded to these bases for rejection in Amendment C filed on January 11, 2008, but the examiner has not addressed or otherwise acknowledged Applicants' arguments. Applicants again respectfully traverse these grounds for rejection as set forth below.

a. Barraclough Teaches Away From the Subject Matter of Claims 15-16, 32-34, and 39-40, and, Therefore, Does Not Render These Claims Unpatentable.

[2] The Office Action indicates that the examiner also has rejected claim 35 as unpatentable over Barraclough. Claim 35, however, was canceled from the application by Amendment C, filed on January 11, 2008.

Claim 15, as originally filed, recited:

A method for fabricating an electrical circuit, comprising the steps of:

depositing a layer of a first conductive material onto a surface of a substrate;

depositing a layer of a second conductive material onto said layer of a first conductive material;

selectively etching a first portion of said layer of a second conductive material and a portion of said layer of first conductive material; and

selectively etching a second portion of said layer of a second conductive material.

As such, claim 15 expressly requires that a first portion of a layer of second conductive material and a portion of a layer of first conductive material be etched in the same step. Because the two layers are etched in the same step, it is inherent that the same etchant must be used to etch both layers. Notwithstanding, Applicants previously amended claim 15 to explicitly recite the foregoing step being performed "using the same etchant."

The examiner asserts that Barraclough teaches or renders obvious the foregoing combination of steps. Office Action at 3. The examiner's analysis as set forth in the present and earlier Office Actions, however, undermines the examiner's conclusion and, indeed, supports Applicants' position that Barraclough teaches away from the subject matter of claim 15. *Id.* More particularly, Applicants contend that Barraclough does not teach the combination of steps set forth in claim 15 because Barraclough does not teach selectively etching a first portion of a layer of second conductive material and a portion of a layer of first conductive material in the same step using the same etchant. Indeed, Barraclough explicitly teaches away from this step by teaching that etching of its various layers must be performed using different etchants and, therefore, in different steps. *See, e.g.*, Barraclough at col. 3, ll. 40-42 ("It is preferred that the etchant used for each successive layer be of such a type as to not appreciably attack the other

materials."); col. 3, ll. 61-65 ("One feature of the present invention resides in the fact that the etchants utilized for etching the gold, nickel, and Nichrome layers do not appreciably attack the other layers so that selective etchings can be accomplished without effecting the other layers."). The examiner has recognized this important distinction. Office Action at 3 ("The etchants used for the different conductive layers are different (Cf, Col 3)."). Not surprisingly, because Barraclough teaches the importance of using different etchants for etching the different conductive layers, nowhere does Barraclough teach or suggest the use of a single etchant to selectively etch more than one conductive layer in the same etching step or otherwise.

Because Barraclough teaches away from the subject matter of claim 15, it is an improper reference under 35 U.S.C. 103(a). Accordingly, Applicants respectfully submit that the rejection of claim 15 is improper and request reconsideration and withdrawal thereof. Because claims 16, 32-34, and 39-40 depend from and add further limitations to claim 15, Applicants respectfully submit that the rejections of these claims are improper, as well, and request reconsideration and withdrawal thereof.

b. Barraclough And Yuichi Do Not Teach Or Suggest The Subject Matter Of Claims 1-6, 13-14, Or 26-31, And, Therefore, Do Not Render These Claims Unpatentable.

Claim 1 recites a method for fabricating an electrical circuit, comprising the steps, among others, of depositing a layer of a first conductive material onto a surface of a flexible substrate, wherein at least a portion of the substrate is translucent or transparent. The examiner contends that Barraclough and Yuichi collectively teach all of the features of claim 1, that it would have been obvious to combine the teachings of these references, and that the subject matter of claim 1 therefore is unpatentable. In this regard, the examiner asserts that "[t]he thin film devices taught by Barraclough will generally be flexible," apparently suggesting that Barraclough teaches a

flexible substrate. Office Action at 3. Applicants respectfully disagree and traverse the rejection of claim 1 at least because neither Barraclough nor Yuichi teaches nor suggests a method for fabricating an electrical circuit on a surface of *a flexible* substrate. As such, even if combined, which Applicants do not concede would be proper under an obviousness analysis, Barraclough and Yuichi do not teach or suggest the subject matter of claim 1.

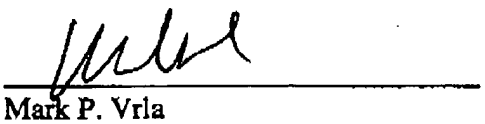
More particularly, Barraclough is directed to a process for forming thin-film circuit devices on a substrate. Barraclough at col. 1, ll. 6-9. The only substrate material disclosed by Barraclough is alumina ceramic. Barraclough at col. 2, ll. 38-39. One skilled in the art would know that alumina ceramic is not flexible. Moreover, Yuichi is directed to a method for manufacturing display devices. English Translation of Yuichi Provided by USPTO ("Yuichi Trans.") at p. 2, ll. 12-15. The only substrate material disclosed by Yuichi is a glass plate. *See, e.g.*, Yuichi Trans. at p. 4, ll. 12-13. A glass plate, of course, is not flexible. In sum, neither Barraclough nor Yuichi teaches or suggests a method for fabricating an electrical circuit on a flexible substrate.

As such, claim 1 is distinguishable over Barraclough and Yuichi, and Applicants respectfully request reconsideration and withdrawal of this ground for rejection. Because claims 2-14, 26-31 and 45 depend from and add further limitations to claim 1, Applicants submit that these claims are distinguishable over Barraclough and Yuichi, as well. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of those claims, as well.

4. Conclusion

Applicants respectfully submit that the application is in condition for allowance and respectfully request reconsideration thereof.

Respectfully submitted,



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